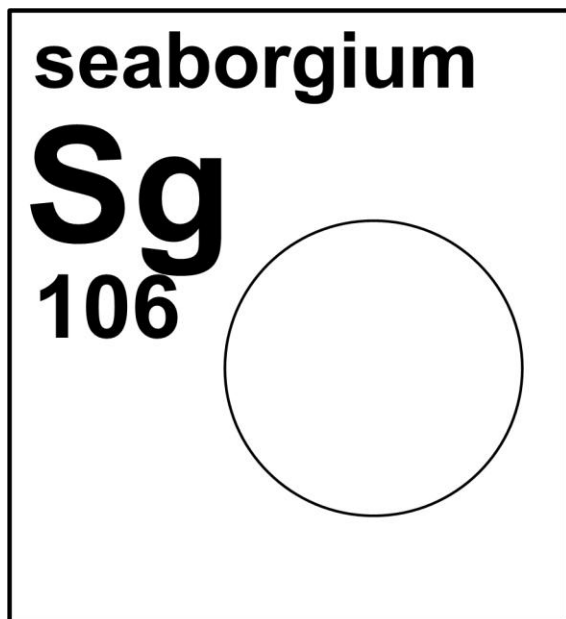





seaborgium



Stable isotope	Atomic mass	Mole fraction
(none)		

Half-life of radioactive isotope

Less than 1 second 
 Between 1 second and 1 hour 
 Greater than 1 hour 

²⁵⁸ Sg	²⁵⁹ Sg	²⁶⁰ Sg	²⁶¹ Sg	²⁶² Sg	²⁶³ Sg	²⁶⁴ Sg	²⁶⁵ Sg	²⁶⁶ Sg	²⁶⁸ Sg
²⁷⁰ Sg	²⁷¹ Sg	²⁷² Sg	²⁷³ Sg						

Important applications of stable and/or radioactive isotopes

Element 106 was discovered in 1974. The nuclide ²⁶³106 was produced in the Super HILAC at Lawrence Berkeley National Laboratory by bombarding a target of ²⁴⁹Cf with ¹⁸O ions. This nuclide decays by α emission with a half-life of around 1 s. Consensus on the name of this element was announced by IUPAC in 1997.

Applications: Sg has no commercial applications. ²⁶⁵Sg was one of the decay products used to confirm synthesis of Element 112 in a particle accelerator experiment.

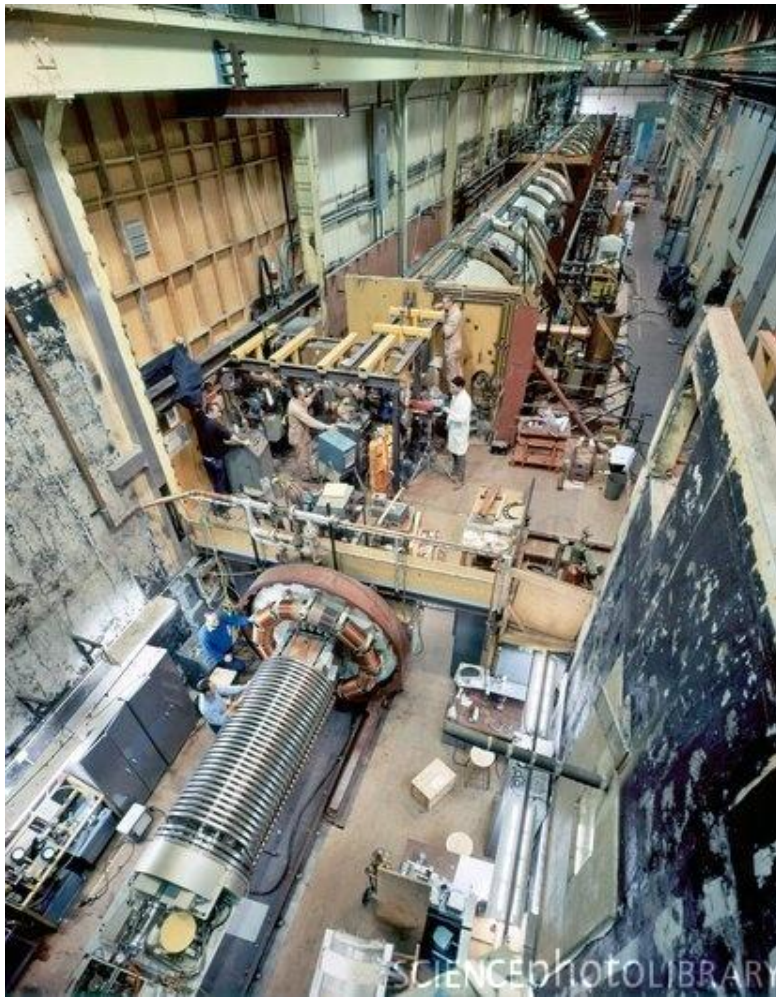


Figure 1: Super Heavy Ion Linear Accelerator (Super HILAC) at the Lawrence Berkeley National Laboratory, California, USA. This particle accelerator could accelerate the ions of all known natural elements to energies where they could be smashed apart. This led to the discovery of five superheavy (transuranic) elements.